

#3/B

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dz Ching Ju et al. Examiner: Ted T. Vo
Serial No.: Group Art Unit: 2762
Filed: Docket: ST9-95-010US2
Title: METHOD OF, SYSTEM FOR, AND COMPUTER PROGRAM PRODUCT
FOR PROVIDING EFFICIENT UTILIZATION OF MEMORY HIERARCHY
THROUGH CODE RESTRUCTURING

CERTIFICATE OF MAILING UNDER 37 CFR 1.10

'Express Mail' mailing label number: EL540750213US

Date of Deposit: October 10, 2000

I hereby certify that this paper or fee is being deposited with the United States Postal Service 'Express Mail Post Office To Addressee' service under 37 CFR 1.10 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

By: *Isabell Ogata*
Name: Isabell Ogata

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Prior to a first Office Action, please amend the above-identified application as follows:

IN THE CLAIMS

Please amend claims 1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 17, and 18 as follows:

1. (AMENDED) A method of restructuring a program comprising basic blocks for execution by a processor having a memory hierarchy [comprising] comprised of a plurality of levels, the method comprising the steps of:

a) constructing a Program Execution Graph (PEG) corresponding to a first level of the memory hierarchy from control flow and frequency information from a profile of the program, the PEG comprising a weighted undirected graph comprising nodes and edges, each node representing a [the] basic block[s] , each [and] edge[s] representing a transfer of control between a pair[s] of the basic blocks, each of the nodes having a weight equal to the size of the basic block represented by the node, and each of the edges having a weight equal to a frequency of transition between a pair of basic blocks represented by a pair of nodes connected by the edge;